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Low carbon governance: Mobilizing community energy through top-down support?

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Low carbon governance: mobilising community energy through top-down support?

Abstract

Community energy makes an important contribution to sustainable energy generation, reduction and management, and is a desirable feature of a low carbon future. Renewable community energy is increasingly gaining momentum even in the centralised UK energy market. The challenge of low carbon transitions is faced by multiple territorial governments, and requires inclusive governance arrangements in which a combination of actors work together to implement community strategies towards a climate resilient future. Low carbon governance is a multi-level and (co-)evolving process, especially in the complex interactions between actors of the core, inner periphery and civil periphery. The devolution of power within the UK has enabled Scotland to establish an ambitious policy agenda for renewable energy. By exploring an established national community energy programme, this study examines the interplay among different actors and looks into how multi-level governance can be strengthened. This paper combines multi-level and evolutionary governance theory to understand the extent to which top-down initiatives facilitate community renewable energy projects and help drive wider system transformations. It concludes that in an evolving policy environment, top-down support for community energy is a necessary motivator. This requires the state to play a dominant role in directing low carbon transitions, while acting in concert with non-state, local and regional actors. If communities are to benefit from energy transitions, wider policies must be aligned with community needs, or else community energy will be pushed to the margins of the next energy revolution.

Keywords: multi-level governance, evolutionary governance, community renewable energy

Introduction

Renewable energy (RE) is a policy priority for many nations (REN21, 2014) and has become an important pillar of the EU's climate change strategy for progressing towards a low carbon future.¹ Communities play a key role in hosting renewable projects in their area. This is particularly evident throughout Europe, where community energy² is gaining popularity through success stories of energy generation and community empowerment (Lovell, 2014; Seyfang and Haxeltine, 2012) as well as boosting community social and economic resilience (Haggett, 2009; Park, 2012). Strachan *et al.* (2015) argue that communities, conceptualised as 'niches', can impact low carbon policies and nestle within the institutional arrangements of mainstream regimes. This positions communities within the wider political landscape and governance architecture and aids the transition towards a low carbon future (Seyfang *et al.*, 2013).

From 2000 onwards, there has been an upswing in community renewables in Britain, characterised by heightened interest among the devolved governments, especially Scotland (Strachan *et al.*, 2006; Strachan *et al.*, 2015). A unique feature of the Scottish policy is that a part of its interventions focuses on rural communities by supporting RE developments

¹ Defined here as a future that minimises the output of greenhouse gases (GHGs) into the environment (Hall and Woolvin, 2012).

² Community energy is understood as technologies producing heat and/or electricity from renewable sources, for which the owner is a community group, local business, farm or estate, local authority, housing association, or other public sector or charity (Energy Saving Trust 2014).

through schemes such as the Community and Renewable Energy Scheme (CARES). CARES is promoted as the ‘flagship scheme for community energy’ (Scottish Government, 2014a) and recognised by the Organisation for Economic Co-operation and Development as a ‘pioneering intervention’ (OECD, 2012). Strachan *et al.* (2015: 107), however, express concerns that such initiatives by devolved governments broadly support the maintenance of large-scale energy pathways which can ‘prevail socio-technical regimes rather than stabilising them’. A critical examination of the governance structures of such funding streams will help to reveal the extent to which they drive wider system transformations.

Generally, although RE is seen as an opportunity for economic growth and energy security, it often requires a flexible policy framework and a multi-level governance (MLG) structure (OECD, 2012). Recent studies reported in the literature (see Sugden *et al.*, 2012) suggest that communities can act as local leaders in supporting inclusive MLG schemes and enhance ‘citizen participation in key decisions concerning the use of local resources in their territories’ (OECD, 2012: 75). It is increasingly important for a heterogeneity of actors to work together to shape community strategies, especially in the global carbon crisis. Sugden *et al.* (2012) argue that tackling necessary change at all levels will increase coherence and momentum in the move to a low carbon society. This is particularly reflected in EU policies which emphasise the role of inclusive MLG (COM, 2009). Betsill and Rabe (2009: 202) describe this shift in governance as a transition from international and national actions (*epoch one*) towards a more decentralised approach (*epoch two*), with the more recent agenda emphasising collaborative and community-based approaches (*epoch three*).

Low carbon governance is a multi-level and (co-)evolving process. Scholars increasingly recognise that low carbon transitions involve actors at a variety of jurisdictional levels (Betsill and Rabe, 2009) and are subject to (co-)evolution, especially within the complex interactions between supranational, subnational and non-state actors (Van Assche *et al.*, 2014). As the traditional divisions between local, national and global are disrupted by the politics of climate change actors (Betsill and Bulkeley, 2006), it is timely to explore what type of governance structures will facilitate a low carbon future.

This research combines multi-level governance theory and evolutionary governance theory (EGT) to capture the interplay among actors shaping community energy, because this is an issue that cuts across territorial governments, is influenced by regional, local and community actors, and is evolving through time. By exploring the MLG structures of CARES, this paper examines how far a devolved government such as Scotland’s supports community renewables, and how well it is situated to provide effective policy responses and drive wider system transformations.

This paper begins by setting out the scientific and policy rationale for community energy in the UK and Scotland. Following this, the theoretical underpinnings of multi-level and evolutionary governance are presented as the backbone of our analysis of CARES governance arrangements. It then discusses the empirical results from this Scottish exemplar and concludes with implications for policy, academic debates and future research into community energy in the UK and beyond.

The community energy landscape in the UK and Scotland

Energy generated by communities plays a small but growing role in Europe. The flurry of renewable energy activities at the community level is staggering, especially in Denmark, Sweden and Germany, where ownership of renewable projects has been encouraged since the 1990s (Julian, 2014). These countries manage to stimulate community energy via

proactive strategies with a mix of ‘technology-push’ and ‘demand-pull’ policies (Strachan *et al.*, 2006).

In the UK, in contrast, community renewables remain weakly developed, with the ‘Big 6’ utility companies capturing 93.5% of the market for energy generation (Julian, 2014). While community energy has undergone a modest upscaling, the development of community energy is limited because of the dominance of market support, the planning system and the control of land (Strachan *et al.*, 2015). Some argue that if we are to move from the Big 6 to the Big 60,000 (Barker, 2013), community groups will need the engagement of national and international initiatives and of the local population. The foundations of such engagement are set out in the UK’s very first Community Energy Strategy (Department of Energy and Climate Change – DECC, 2014). The Scottish Government has also released a Community Energy Policy Statement Draft for public consultation (Scottish Government, 2014a), outlining current needs of and forms of support for communities.

We are witnessing, therefore, an epoch in which community participation in energy production is gaining momentum even in the centralised UK energy market (Strachan *et al.*, 2015). There has not only been growing interest in community energy but also an increasing uptake through governmental programmes (Park, 2012), with approximately 5,000 community energy groups currently active across the UK since 2008 (DECC, 2014). The trend in the UK is mainly driven by community benefits (Author A and C, 2015), with a slow emergence of hybrid community ownership patterns and full community ownership and control (Haggett *et al.*, 2014). However Strachan *et al.* (2015) observe that it is mainly households, small businesses and public bodies which have benefited from this shift, rather than community groups.

Energy regulation is a power reserved to the UK government.³ Powers devolved to Scotland, however, have enabled the development of an ambitious RE agenda that goes beyond that of the UK as a whole, and capitalises on Scotland’s natural resources (OECD, 2012). Since devolution, Scotland has gained control over many aspects of planning and discretionary spending on economic development, and a degree of operational control over market support mechanisms, such as the Renewables Obligation (Scotland) (Cowell *et al.*, 2013). Despite these developments, Strachan *et al.* (2015) argue that although devolution has increased the attention on community renewables, key socio-technical features, such as market support and planning arrangements, still favour large corporations. And although new avenues to community renewables are available (e.g. joint ventures), they seem to ‘trap community renewables in a dependence relationship with harder energy paths’ (Strachan *et al.*, 2015: 106). To put it another way, community renewables are often pushed to the margins of energy provision.

For Scotland, the transition to a low carbon future has become a strategic priority (Scottish Government, 2011) to meet goals for both climate change and energy security. Its RE policy aims to ensure that Scottish communities share in the ‘next energy revolution’, and take advantage of the opportunity to generate income and benefit from local developments (Scottish Government, 2014a). There are a number of factors behind the momentum towards community renewables in Scotland. Devolution has provided political opportunities through the Land Reform (Scotland) Act (Scottish Parliament, 2003) which introduced the community right to buy land, and also through the Community Empowerment (Scotland) Act (Scottish Parliament, 2015) which enables communities to acquire land to use for the good of the community, including for renewable community projects. This is also illustrated by Scotland’s RE policy, which aims to generate all of

³ This is done through the government regulator for the electricity and downstream natural gas markets in the UK, the Office of Gas and Electricity Markets (OFGEM).

Scotland's gross annual electricity consumption and 500 MW of community and locally owned RE by 2020 (Scottish Government, 2013a).

Scottish communities' experience of renewables is underpinned by a wider local engagement with the low carbon economy, assisted by many Scottish Government-led initiatives such as CARES, Climate Challenge Fund, Renewable Energy Investment Fund, People and Communities Fund, and Scottish Community and Householder Renewables Initiative, which are enhanced by a range of general support designed to increase community engagement (Scottish Government, 2007). Such initiatives represent a gradual transformation in energy generation towards an increased proportion of community energy.

CARES

The core of the CARES scheme is to deliver community benefits and contribute to Scotland's community renewable energy targets (Scottish Government, 2012). The government aims to maximise the benefits for communities arising from RE projects, asserting that communities can benefit not only economically but also in terms of community cohesion, confidence and skills development (Scottish Government, 2013a).

However, CARES had to evolve to comply with EU state aid regulations and Feed-in-Tariff (FITs)/Renewable Heat Incentive (RHI) requirements. From its initial grant-based model, in 2011 CARES switched to providing pre-planning loans to communities (Changeworks, 2013). The aim of the CARES loan fund was to provide advice and financial support during the high-risk, pre-planning stages of renewable projects to community groups and rural businesses that wished to generate RE or benefit from local commercial RE schemes (Scottish Government, 2013b). Funding was accessible to communities in the initial stages of potential (shared) ownership projects.⁴ At that stage CARES also provided small-scale grants for community buildings and start-up costs, and was delivered by Community Energy Scotland (CES) across Scotland. In August 2013, the contract was transferred to Local Energy Scotland (LES), which now administers the CARES pre-planning loans, start-up grants, Local Energy Challenge Fund grants, Infrastructure and Innovation Fund grants, and a range of other support mechanisms (LES, 2015). Under this new structure, projects which fail to go forward (e.g. because of planning rejection) 'can apply for their loans to be written off' (Scottish Government, 2014b: 3), making it attractive to communities since they can secure funds and start-up finance at low risk.⁵

Multi-level and evolutionary low carbon governance

The challenge of low carbon transitions spans different territorial governments. This calls for inclusive and participatory governance arrangements, in which a dynamic network of actors and institutions work closely together to implement community strategies for a climate resilient future (GCEC, 2014). Defining governance for a low carbon future, Andersson *et al.* (2010: 3) include 'all purposeful mechanisms and measures aimed at steering social systems towards making the transition'. Similarly, Aylett (2014), summarising the results of a global survey, highlights the necessity of governmental and non-governmental actors working together with key civil-society groups and the private sector, within broader networks of climate change governance. This interactive style of

⁴ There are also a number of complementary funding options available for community buildings, infrastructure and innovation projects, as well as post-planning loans available through the Renewable Energy Investment Fund (REIF).

⁵ Since 2009, about 420 community organisations have benefited from CARES which manages a budget of £13.7 million to help communities with RE developments (Scottish Government, 2013a).

policymaking and learning suggests a ‘multi-level perspective’ on the pathway towards a low carbon future (Scrase and Smith, 2009).

Multi-level governance

MLG has emerged as an approach for exploring the development, implementation and effectiveness of policies and initiatives involving heterogeneous actors (Marsden and Rye, 2010). It relates to shifting authority away from national governments and empowering subnational and supranational actors (Bache and Flinders, 2004a). While definitions of MLG are diverse, Bache and Flinders (2004b: 197) identify four common strands: decision-making at various territorial levels is characterized by the increased participation of non-state actors; the identification of territorial levels of decision-making is more difficult in the context of complex overlapping networks; transformation of the state’s role as state actors develop new strategies of co-ordination, steering and networking to enhance state autonomy; and the nature of democratic accountability is challenged.

In general, MLG calls for narrowing policy gaps between levels of government through the adoption of tools for vertical and horizontal cooperation (Corfee-Morlot *et al.*, 2010). State and local governments are increasingly aware of interdependencies and areas of policy overlap that require coordination across and interaction between different levels (Betsill and Rabe, 2009). Analogous to the idea of MLG, Geels (2012) has proposed a ‘multi-level perspective’ which identifies how diverse stakeholders, including mainstream (‘regime’) and alternative (‘niche’) organisations and communities, work together to align policy frameworks with community needs. This multi-level perspective does not weaken the role of the state but rather redefines the scope and scale of its activity (Betsill and Bulkeley, 2006).

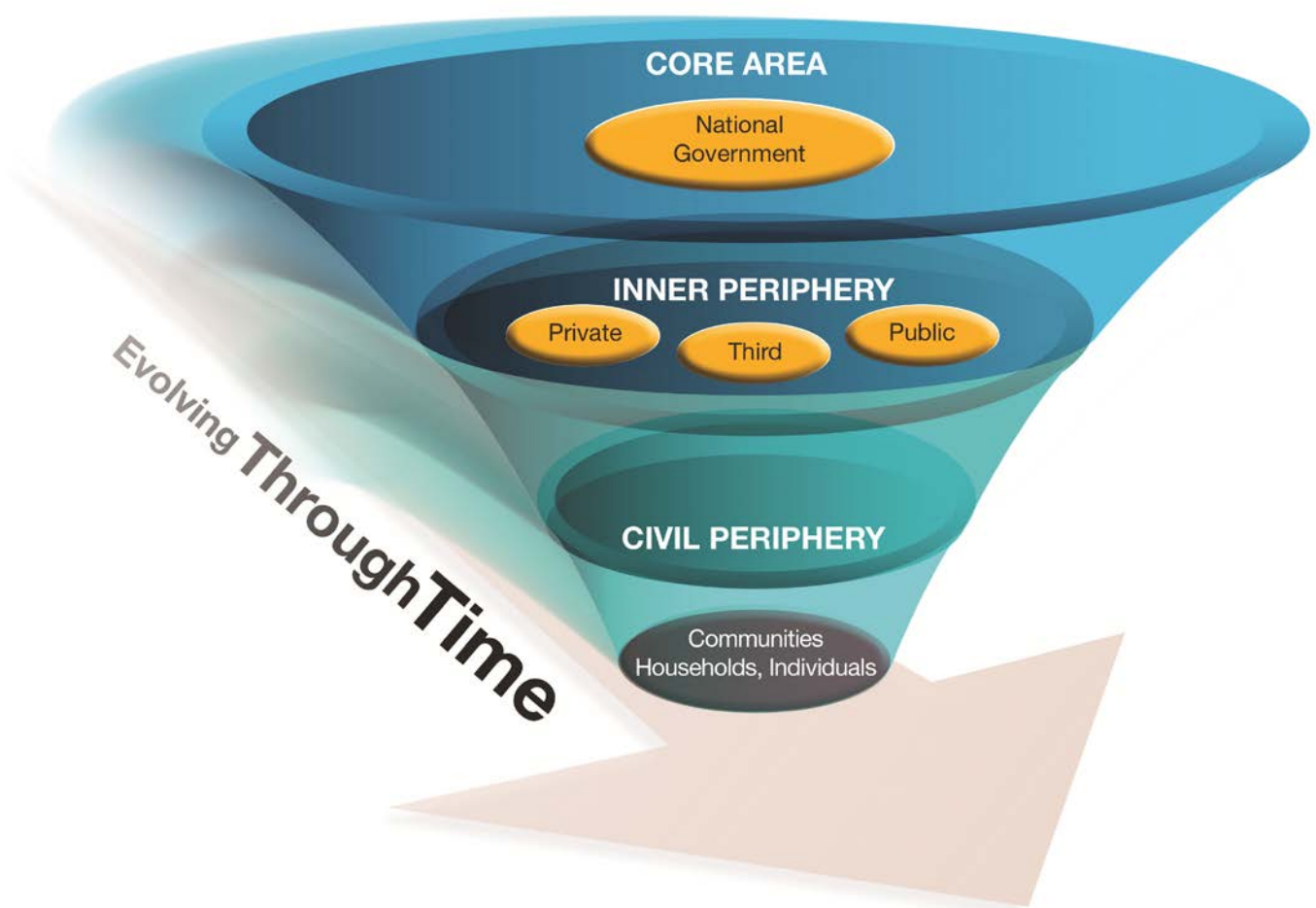
In contrast to the multi-level approach, many scholars highlight the fundamental role of the state. Hildingsson (2014), for example, adopts a ‘state-centric’ view which holds that the state plays a dominant role in governing low carbon transitions. The state is considered key in governing social changes, not only as a governance-taker but also as a governance-shaper (Pierre and Peters, 2000). Pierre and Peters (2000) also argue that even if contemporary governance calls for a range of stakeholders, institutions and relationships, the traditional political authority and state institutions remain central. Although community resources are generally dispersed, the main source of intervening power tends to be national governments (Marinetti, 2003). While no single actor can steer low carbon energy transitions, Rotmans *et al.* (2001) argue that social actors look to the government to take the lead. One should not focus only on the dominant role of the state as policymaker, however. Dawley (2014) argues that we should not neglect the plural role of governments as facilitators, controllers, and directors (depending on the transition stage) in mediating the creation of paths leading to a low carbon future.

This focus on the prominent role of the state has been criticised because of connotations of hierarchy. Rosenau (2004: 40) states: ‘Since governance involves the exercise of authority and the necessity of people looking ‘up’ to, and complying with, the authorities to which they are responsive, it is understandable that [the] multi-level governance concept connotes hierarchy’. According to Jessop (2004: 65), we are witnessing a ‘re-scaling of the sovereign state or the emergence of just one more arena in which national states pursue national interests’. However, it cannot be denied that the mere fact of legitimacy ensures that the state is ‘first among equals’ in the context of governance (Bache and Flinders, 2004b: 201).

The MLG approach provides a starting point for exploring links between national, regional and local levels of governance, and helps us understand how the state, third and private sectors interact to design policies and influence people’s behaviours and actions

(Hooghe and Marks, 2007). Given this plurality of actors, Corfee-Morlot *et al.* (2011) structure MLG into three basic layers of decision-making and influence, based on the Habermasian model of circuits of power (Habermas, 1998), which we use in our analysis of governance structures. These layers hold across levels of policymaking from national to local. Figure 1 illustrates these levels whereby the influence in policymaking diminishes from core to periphery:

- a) The *core area* of public decision-making, including institutions that have formal governmental decision-making roles;
- b) The *inner periphery*, which interacts closely with the core and includes institutions that have autonomy and self-governance functions. This layer is the lens through which policies of the core are achieved and articulated. This is often composed of the public sector (including non-departmental public bodies and government agencies); the private sector; and the third sector;
- c) The *civil periphery* is the wider social context where policies reach society (e.g. communities, households, individuals). Corfee-Morlot *et al.* (2011) call this ‘civil-social infrastructure of the public sphere’.



- Figure 1 -

Evolutionary governance theory

EGT is an approach to understanding how markets, laws and societies evolve together (Van Assche *et al.*, 2014). It combines concepts from biology (Maturana and Varela, 1987), social systems theories (Luhmann, 2004), and institutional and development economics (North, 2005). EGT is rooted in biological evolutionary theory in which the idea of *autopoiesis* (Greek: self-creation) signifies that everything in a given system is the product of the evolution of that system. Autopoiesis entails the interpretation of environments in and by the system (Van Assche *et al.*, 2014).

According to EGT, all elements of governance are subject to evolution and co-evolution. Given that governance evolves in a complex and unstable environment incorporating changing combinations of actors, it is unlikely that governance structures can rely on stable rules for long (Van Assche *et al.*, 2014: 2). Transitions are conceptualised as co-evolutionary processes involving heterogeneous actors and social groups (Geels, 2012). It is therefore essential for us to understand how organisations and institutions change in relation to each other and how policies evolve continuously in relation to changes in our society (Geels, 2002; Van Assche *et al.*, 2014). A central element in EGT is therefore understanding ‘change’, which is often seen as one of the most important challenges of governance. This understanding is especially important as societies undergo profound changes in their governance structures to accommodate transitions to low carbon regimes.

The notion of evolutionary governance is not new, however. Scholars of evolutionary economic geography (Boschma and Martin, 2007; MacKinnon *et al.*, 2009) and transition management (Loorbach, 2007; Rotmans *et al.*, 2001) have also tried to understand processes and structures over time, through mapping transition phases, path dependency trajectories, cognitive proximity and related variety analyses. EGT is distinct from these established approaches in that it begins from the premise that all elements of governance evolve and co-evolve, and that organisations, formal and informal institutions and perspectives continuously change in relation to each other. Governance is therefore radically evolutionary (Van Assche *et al.*, 2012). This element of evolution/co-evolution is less emphasised in the aforementioned approaches.

Understanding governance as subject to evolution and co-evolution can help us outline the evolutionary nature of low carbon governance. According to EGT, policies and strategies often fail because they do not fit the current situation or because ‘they see [a] new situation too much in the light of old stories embedded in governance structures’ (Van Assche *et al.*, 2014: 3). Such insight is especially necessary for the low carbon agenda due to the dynamic network of current and new actors, institutions, markets and discourses which are constantly changing the governance arrangements. In Scotland, the low carbon agenda is relatively new⁶ and still at an ‘experimentation’ stage in which people often come up with innovative solutions before state actors do (Author D *et al.*, 2014). In this environment, EGT is useful for fostering new spaces for analysis and experimentation.

A path towards a low carbon future is subject to various dependencies. EGT distinguishes between path dependency (i.e. history matters), interdependence (dependence between actors and relations between institutions in a governance process) and goal dependence (dependence on future targets). All three are equally important because the configurations of institutions and relationships between actors alone cannot change the course of low carbon governance.

⁶ At least in terms of legislation – the Climate Change Scotland Act was released in 2009.

Stemming from this, ‘transitions are seen as co-evolutionary processes [EGT]... and involve many actors and social groups [MLG]’ Geels (2012: 471). In other words, transition to a low carbon future will probably require both multi-level interaction between various actors in policy, culture, society, markets and industry as well as (co-)evolution processes among these actors, institutions and perspectives in a constantly changing policy environment. Figure 1 illustrates the multiple levels which are evolving through time. This paper conceptualises low carbon governance as a combination of both multi-level and evolutionary governance across different spatial levels. The study assesses the CARES scheme through the key concepts mapped out above, with a view to interpreting and explaining the interplay between different actors and to exploring how MLG can be strengthened. This will help to answer the question: to what extent are initiatives such as CARES capable of providing effective support for community renewables and driving wider energy system transformations?

Methodology

This study draws on previous work carried out by Author A and Author B (2015) into the role of rural communities in the low carbon governance agenda in Scotland. To extend our analysis, we focus on CARES by mapping its governance path and decision-making mechanisms.

We conducted 17 in-depth face-to-face interviews with a variety of stakeholders in July and August 2013, with two complementary interviews in May 2015. The aim was to explore stakeholders’ involvement with and opinions of CARES, and interviewees included: community members (5), representatives of small and medium enterprises (3), farmers/landowners (2), a representative of a LA (1), and staff of the Scottish Government (1), LES (1) and CES (4) who were directly involved in the delivery of CARES. The community members interviewed were selected to include those involved in renewable energy projects of various sizes and scales and at different stages of development. Box 1 contains an overview of the questions asked during the interviews.

Face-to-face interviewing was used because it allowed focus on the main topics while allowing for elaboration, which is important for a deeper understanding of *who*, *why* and *how* questions (Saunders *et al.*, 2003). Interviews lasted 60-100 minutes, were recorded (with consent), and transcribed. Interview data was coded, categorised and analysed using the constant comparison method and analytic induction to break down the data into discrete ‘incidents’ (Glaser and Strauss, 1967). The data was analysed using the qualitative data analysis software MAXQDA. The research was based on a case study approach and did not involve an overall evaluation of CARES.

A (co-)evolving policy landscape

CARES has changed significantly since its inception. While it originally supported community energy projects through the provision of grants, it has changed to supporting projects through FITs or Renewable Obligation Certificates (ROCs) (Scottish Government, 2013a). If CARES had continued as a grant scheme, applicants would not have been eligible for FITs. FITs and ROCs are managed centrally by the UK government and administered by the DECC. The Scottish government had to change the way communities received support:

In terms of getting the FITs agreed at the European level, they [UK government] said that the FITs with a grant is an overcompensation ... so we then had to re-write

how we offered support to communities because we could no longer give grants. We had to review how we supported communities in terms of the funding and then moved from grants to loans (Scottish government officer).⁷

Although the level of energy market initiatives can be determined in Scotland, the form of such initiatives is determined externally (Sugden *et al.*, 2011). The core (UK government) regulates FITs, while the devolved governments and inner periphery and civil periphery actors have a limited capacity for influencing energy market initiatives. Changes in UK policies changed the way communities receive support locally. FITs are currently under consultation (DECC, 2015), which will probably change the way community energy is supported. This is an illustration of how initiatives evolve and co-evolve in relation to each other, and how community support is re-defined in the changing policy domain in Britain.

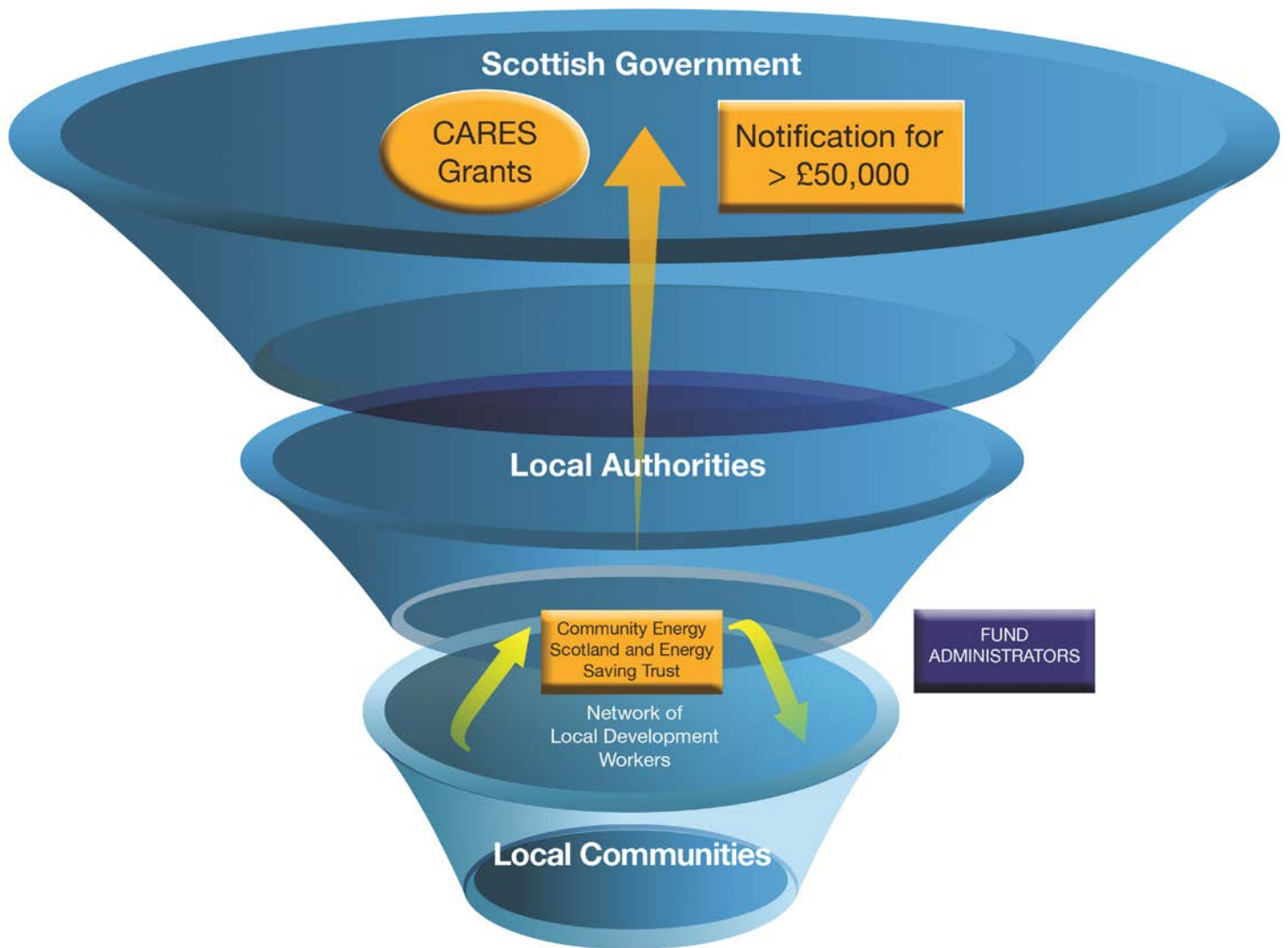
Independent inner-periphery actors

Historically, the fund administrators, as inner-periphery actors, would assess applications and make in-house decisions on which projects were awarded grants. The decision-making for the grants was a quick process: *the decision-making process was relatively straightforward because we made all the decisions really (CES).*⁸

Under this structure, the fund administrator had the main responsibility for delivering CARES, providing support to communities and deciding on which projects would be awarded grants (Figure 2, Author A and Author B, 2015). Although the role of the state was central in providing top-down support to communities, an inner periphery, non-state actor worked closely with communities on the ground. Although the administrators were appointed by the core, they worked with local communities independently. Governance structures were therefore focused on the lower territorial levels where authority was shifted from the national government to empower non-state actors. In this case, multi-level arrangements were in the shadow of governmental hierarchy (Bache and Flinders, 2004b: 201).

⁷ Quoted in August 2014.

⁸ Except for applications exceeding £50,000, in which case the government would be notified beforehand.



- Figure 2 -

Upscaling towards the core

The transition from grants to loans created changes within the ‘simple’ grant governance structure⁹. A panel, operating at the core, was set up by the Scottish Government consisting of representatives from a variety of sectors, to effectively address applicants’ needs. Since August 2013, CES and LES have assessed all the applications received. Following this, they are submitted to the panel (chaired by the Scottish Government), which then decides which applications are successful. Figure 3 illustrates the new governance structure, in which the additional evaluation body at the core level can be observed:

⁹ Community groups, including rural businesses, became eligible to apply for CARES loans.

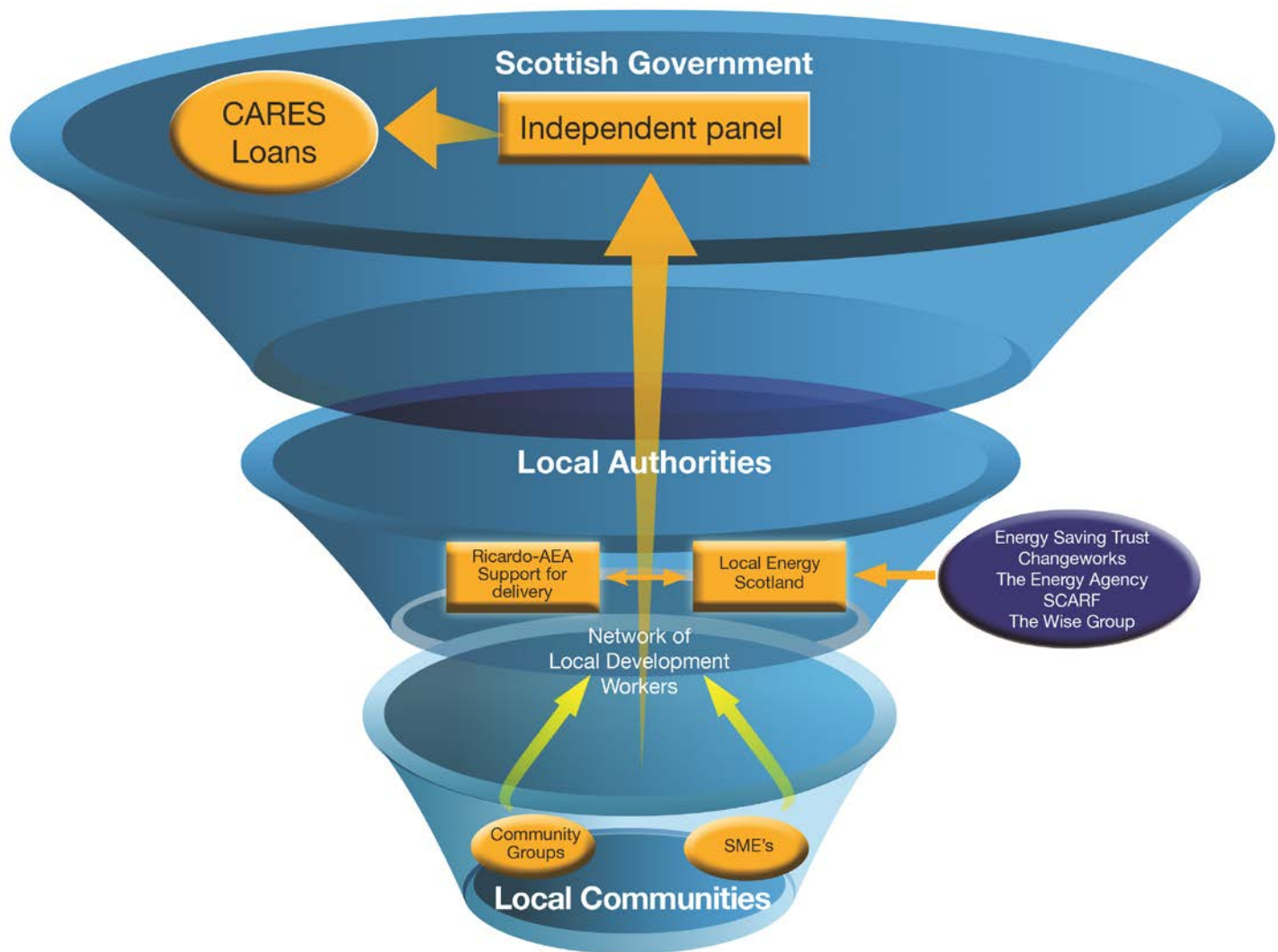
Now we chair the CARES advisory panel ... so there is more of a governance structure in there ... and I think that's correct (Scottish Government officer).

This evolved structure, distanced from the fund administrators, was considered 'fair' (CES officer) and a 'good' governance approach (CES and LES officers) in comparison to the previous delivery mechanism. However, with the evolution of the scheme, and by opening the scheme to other eligible parties (i.e. rural businesses), respondents found that the processes became 'more complex':

It was very clear, the scheme was open to non-profit-distributing community groups ... That was straightforward. It's blurred a bit with the CARES loans because that has been opened up to rural businesses as well as community groups ... and that required a slight refinement in the different types of obligations that would be placed on the different eligible parties, so that became more complex (CES officer).

The above quote illustrates fundamental changes in the wider governance architecture. By opening up funding to a range of groups and altering the type of support offered, the responsibility for decision-making moved from the inner periphery to the core. This was perceived as 'distant' from the fund administrators but the majority agreed that the panel represented a variety of sectors and areas of expertise which had been missing in the previous structure.

It is often argued that low carbon transitions will require a MLG approach, with decision-making taking place at various levels, and collaboration between state and non-state actors (Bache and Flinders, 2004b). However, this study found that for the top-down funding scheme of CARES, powers held by the core became more important as the scheme evolved. It was felt that shifting responsibilities upwards to a higher body improved accountability. Such shifts should not, however, add unnecessary complexity and they should maintain a transparent and democratic decision-making mechanism (Bache and Flinders, 2004b). Van Assche *et al.* (2014) suggest that changes in policy require changes in governance arrangements to fit evolving situations. However, this raises questions about institutional readiness of policy and of governance structure, and whether new complexities can be ironed out.



- Figure 3 -

Inner periphery 'serving' the civil sphere?

The first step for community groups who want to apply for CARES funding is to contact the local development officers, who support the applicants through the whole project development process (LES, 2015). Their role is to assist in identifying appropriate renewable technologies, provide support and advise groups who wish to generate their own energy or benefit from commercial operations.

We've always set out to be very receptive and to provide a full, independent and objective advice service. And that really stems from our interest in supporting communities, experience of working with them over a long period (CES officer).

We help them to work out their applications ... and help them get the relevant professional advice in place and look at their options and decide what's best for them. We build a relationship with them (LES officer).

Community members felt that the role of the administrators was: *proactively supportive and enabling* (Community treasurer); *they knock down the door saying – come on guys, what are you doing about it?* (Community trust). As many community groups did not have

the relevant expertise for their RE projects, they were pleased to obtain help. A museum director who obtained funding for a heat pump described the relationship: *She was also quite enthusiastic about the project, and so it looked like a good marriage*. The importance of the development officers was also acknowledged in the CARES Review, in which the majority of respondents were positive about the personal relationship they established (Changeworks, 2013).

It was also felt that fund administrators with a social and community mission were needed for successful RE community developments, and that they required support from the core: *If you have dynamic people on a mission who are supported from the centre and where there is a block of government funding to make it possible for them to achieve a mission, they will* (Community trust director).

CARES not only underwent changes in its governance, but also in its administration. During the lifetime of the scheme, the administration moved to a new consortium called LES.¹⁰ Some respondents perceived this change as a challenge to delivering their project, but such change was also seen as unavoidable in a dynamic policy landscape: *It is a quite fast-moving business and people change post[s], and this latest reorganisation's just an illustration of that* (Community energy consortium chairman).

Changes in governance, decision-making, policies and guidelines also brought uncertainty about the ongoing level of local support. Inner-periphery actors were perceived as fundamental to the success of the scheme, as they worked at the scale most relevant to people's lives. They interacted closely not only with the civil periphery but also with the core to ensure that challenges arising at the local level were addressed. Despite this flow of information between the different levels, some respondents expressed concern that the level of assistance they receive from the administrators might decrease as CARES evolved to engage a wider range of eligible groups and to adapt to UK and EU policy requirements. If this occurred, it could perpetuate the marginal position of community renewables in the UK. Strachan *et al.*, (2015) therefore address the need for intermediate bodies to have a more prominent role in 'speaking up' for local communities and challenging wider structural constraints. Similar schemes will have to ensure that, even under evolving (governance) structures, communities still receive personalised support if they are to facilitate a wider system transformation.

The core as an enabling sphere?

The fund administrators characterized their role as 'enablers' in their relationship with the core. They collectively dealt with community issues and adapted to required changes: *we are on the ground identifying issues, they [Scottish government] would respond very quickly to those issues and we jointly redefined the scheme to deal with things as they arise* (CES officer). The core has a central role in providing top-down support to communities, but at the same time it relies on non-governmental actors to narrow policy gaps, share information and foster cooperation between communities and the state (Corfee-Morlot *et al.*, 2010). This aligns with Dawley (2014) who argues that the state has a plural function, not only as a policymaker but more importantly as a director (providing funds) and facilitator mediating the creation of transitions in society.

Despite positive experiences with the core, many community respondents felt that there was a lack of coordination and general guidance, for example in planning permissions, environmental impact assessments and permitted height for wind turbines. A lack of communication between key stakeholders across various sectors was perceived

¹⁰ LES is a consortium consisting of Energy Saving Trust, Changeworks, Energy Agency, SCARF, Wise Group, and Ricardo-AEA.

(Community trust), and some respondents felt that they did not receive ‘political support’ during the planning process (landowner): *It is basically the lack of any political support ... we were left without structural support in trying to achieve, you know, change, real change for a rural community.*

Respondents therefore looked to the government to take the lead and assist in mediating the low carbon path (Rotmans *et al.*, 2001). Although MLG calls for heterogeneity of actors and cooperation across different administrative frontiers, this analysis shows that national governments are still perceived as a dominant actor in governing low carbon transitions. This also links closely to the role of the central state as a creator of path and goal dependencies. Actions are often bounded by past actions (policies and agreements), interplay of multiple actors and goal dependencies. According to van Assche *et al.* (2014: 31), goal dependency is the ‘dependency on the future goals and the influence of shared visions on changes in the actor/institution configuration’. In order to escape such lock-in trajectories, policy ambitions such as carbon reduction targets should not determine decisions and actions beforehand.

The local government’s indirect role

Local governments have emerged as important players in global climate change efforts to protect both people and assets (Aylett, 2014). Sugden *et al.* (2011) recognise the importance of local authorities (LAs) in the move towards a low carbon future as their decisions impact the way communities carry out their work, social and recreational lives. This local dimension is often advocated in promoting community energy where it can create ‘a store of knowledge and regional intelligence, which other levels, especially the more powerful centre, are failing to tap into’ (Smith, 2007: 6278).

In this study, LAs did not have a direct involvement in CARES as they are not officially part of the latter’s governance structure. Despite their absence from CARES procedures, some respondents claimed that some LAs helped promote the scheme:

We work with them on varying levels, so the development officers ... try to work with them ... there’s not a formal point at which we sort of go and engage with the local authorities (LES officer).

It was found that LAs varied greatly in terms of their involvement in supporting community renewables. Some were described as being proactive: *the value of community energy is more generally recognised, they see the benefits for the local economy* (CES officer). Others had their own renewable energy policies, and for others, *community ownership is not on their radar* (CES officer). Although the literature calls for a regionalised approach towards RE governance as a means of addressing local challenges (Rice *et al.*, 2013), the level of support offered by individual LAs in Scotland varies.

A number of interviewees indicated marginal support from LAs, and believed that they would have benefited from more collaboration with them. Others suggested that LAs should take the lead in promoting a low carbon future; as Shaw and Theobald (2011:10) suggested, LAs ‘should act as the glue that binds the different stakeholders together to tackle climate change’. It was recognised, however, that LAs are facing financial cutbacks (Hastings *et al.*, 2013) which could affect their capacity to support community RE (Sugden *et al.*, 2011).

The above discussion reflects the often cited need for coordinated action spanning from community groups to local and national governments, which is the essence of the MLG

approach (Bache and Flinders, 2004b). Respondents emphasised a need for a collaborative and community-based approach (i.e. Betsill's 'third epoch' (2009)):

So it's not joined up. You have policies that sit in different parts of the process with different stakeholder (CES officer).

It needs to be integrated down through all the arms of state...so it just becomes the norm (CES officer).

Discussion and conclusions

Community energy in Britain is characterised by a (co-)evolving policy landscape and re-configuration of governance structures (Strachan *et al.*, 2006). Van Assche *et al.* (2014) argue that policy environments in general are temporary conceptual structures and a result of knowledge and power which are in a state of constant transmutation. Our analysis reaffirms that support and initiatives for community renewables are evolving to conform to wider policy environments. In this context, Scotland's capacity to meet its targets is often constrained by its multilevel interactions with the UK and EU Commission, leaving limited space for manoeuvre in meeting the needs of local communities (Sugden *et al.*, 2011):

Scotland is an energy powerhouse but we have very limited powers on energy policy. That is why I am calling on the UK to take a much more collegiate approach to policy-making on energy and ensure proper consultation with the Scottish Government on major areas of energy policy (Scottish First Minister Nicola Sturgeon, 2015).

This leads to important questions about the role of devolved governments in shaping their own national/regional mechanisms for supporting community energy and in challenging the energy policies that constitute the dominant socio-technical regimes (Strachan *et al.*, 2015). Although there is evidence that devolution has created new avenues into community energy through greater 'bottom-up' engagement and funding support for communities in Scotland, some scholars argue that this often occurs alongside large commercial energy developments which can restrict community renewables as a route for transforming wider systems of energy generation (Marsden and Rye, 2010; Strachan *et al.*, 2006).

Combining multi-level and evolutionary governance has proved a useful framework to examine decision-making structures involving multiple actors over time. It appears that the governance structures of top-down initiatives such as CARES may evolve significantly over the course of their lifetime. Although the delivery of CARES started at the interface between the inner and civil peripheries, responsibilities moved upwards towards the core, which was perceived as providing more accountability and transparency but also as more distant from community needs. Although in general MLG calls for diversity of actors, national governments are still perceived as crucial stakeholders in mediating low carbon transitions. Such perceptions are related to connotations of hierarchy, which some are critical about (Rosenau, 2004), where social actors 'require' the core to coordinate actions at the regional and local level, especially in an evolving low carbon policy environment. The state, however, seems to be the creator of paths and various dependencies. Regarding the latter, Foucault (2003) points out that legitimisation procedures and organisation cultures can be seen as legacies of the past that can influence future governance paths. Visions of the future – such as carbon targets – can also have an impact on present actions and policies.

Despite the central role of the state, one should not wear ‘blinkers’ and depend only on the core. A coordinated collaborative approach was seen as necessary to identify local needs, address challenges and showcase success. Under such a collaborative approach, knowledge and information can flow upwards, downwards and sideways between the core and the inner and civil peripheries (Bache and Flinders, 2004a). This flow of knowledge fits into a wider narrative in the UK, emphasising the necessity of including local and regional actors in decision-making processes (DECC, 2014). However, in a privatised energy market such as the UK this can be an obstacle because energy companies tend to be characterised by short-termism and focused on maximising returns on investments in the current energy infrastructure (Rotmans *et al.*, 2001).

Another important lesson relates to role of top-down funding initiatives in facilitating low carbon pathways. This study found some evidence that, in general, funding support is an important motivator for establishing community RE projects. Funding and advice from experts represent a small (but important) fraction of what communities need in order to undertake RE projects. It was, however, emphasised that such initiatives alone cannot deliver a low carbon future as they are not autonomous but are embedded in larger energy systems of multilevel governance.

The analysis supports conclusions of wider relevance. It reinforces the idea that robust regulatory change should come from the core to achieve an alignment between community needs and nationwide regulations. Key obstacles which slow the progress of projects and limit their success include the failure of the state to establish key, stable and clear regulations, poor communication among key stakeholders, and a lack of coordinated effort between key institutions (Author A and C, 2015). One important first step to address these obstacles would be for national governments to act in concert with LAs and other stakeholders (Corfee-Morlot *et al.*, 2011).

As Sugden *et al.* (2011) argue, much can be achieved in Scotland towards a low carbon future, especially if political leadership, inter-government cooperation, targeted use of resources and public engagement are in place. Top-down support for community energy is a necessary motivator for community energy developments. If communities are to benefit from energy transitions and challenge hard energy paths in the UK and beyond, there must be an alignment of wider policies with community needs, otherwise there is a danger that community energy will be pushed to the margins of the next energy revolution. Although this case study concerns a small research area, we hope it constitutes a foundation for further research on this topic.

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